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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 10/632,938 | 08/01/2003 | Ching-Hung Chen | U 014748-8 | 4986 |
| 7590 05/27/2004 | | | EXAMINER | |
| LADAS & PARRY 26 West 61st Street New York, NY 10023-7604 | | | JIMENEZ, MARC QUEMUEL | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3726 | |

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/632,938 | Applicant(s) CHEN, CHING-HUNG | |
| | Examiner Marc Jimenez | Art Unit 3726 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species A: Claims 1-2, fig. 3-4

Species B: Claim 3, fig. 5-6

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there are no generic claims.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

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examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with William R. Evans on 5/20/04 a provisional election was made without traverse to prosecute the invention of Species A, claims 1-2. Affirmation of this election must be made by applicant in replying to this Office action. Claim 2 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1 and 2** are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng (4,722,125) in view of Elliot (2,899,224) and Matsui et al. (5,121,537).

Peng teaches a method for making a composite tool having a steel shank **11** and a working head **12** that is connected to the steel shank **11** and that is made from metal carbide, the method comprising the steps (a) forming a recess **122** in the working head such that the recess **122** is indented inwardly from a first joint face **121** of the working head **12** in a transverse direction relative to the first joint face **121**; (b) forming a cylindrical protrusion **112** on a second face **111** of the steel shank **11**, inserting the cylindrical protrusion of the steel shank **112** into the

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recess **122** in the working head and pressing the steel shank and the working head **12** against each other in such a manner that the cylindrical protrusion **112** is deformed to fill (col. 2, lines 1-5) the recess **122**, that the first and second joint faces **111,121** abut against each other to define a contact region therebetween, and that the working head **12** and the steel shank **11** cooperatively define a shoulder around the contact region, the shoulder defining a corner adjacent to the contact region; and (d) forming a solder joint on the corner by welding.

Peng teaches the invention cited with the exception of having the recess having a cylindrical section that extends the transverse direction and that is distal from the first joint face, and a skirt section that flares outwardly from the cylindrical section to the first joint face and that has a face, an outer edge adjacent to the first joint, such that the cylindrical protrusion has a diameter greater than that the cylindrical section of the recess and smaller than that of the outer edge the skirt section of the recess. Peng also teaches that the cylindrical section **112** fills the recess, however, there is a little gap between the recess and cylindrical section as shown in fig. 3.

Elliott teaches a recess having a cylindrical section **Y** that extends the transverse direction and that is distal from the first joint face **A**, and a skirt section **13** that flares outwardly from the cylindrical section **Y** to the first joint face and that has a face, an outer edge adjacent to the first joint, such that the cylindrical protrusion **Z** has a diameter greater (col. 3, lines 50-57) than that the cylindrical section **Y** of the recess and smaller than that of the outer edge the skirt section **13** of the recess.

Matsui et al. teach completely filling a recess **5a** with a protrusion **14**.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Peng with a cylindrical section that extends the transverse

direction and that is distal from the first joint face, and a skirt section that flares outwardly from the cylindrical section to the first joint face and that has a face, an outer edge adjacent to the first joint, such that the cylindrical protrusion has a diameter greater than that the cylindrical section of the recess and smaller than that of the outer edge the skirt section of the recess, in light of the teachings of Elliott, in order to more securely fasten the steel shank into the recess.

Furthermore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Elliott/Matsui et al. with completely filling the recess, in light of the teachings of Matsui et al., in order to provide an even tighter and secure attachment.

Regarding claim 2, Elliott teaches that the solder joint is formed by applying a solder material on the corner of the shoulder and subsequently melting the solder material under vacuum conditions (see fig. 3 and col. 2, lines 15-22).

Contact Information

5. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer

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Service at (703) 306-5648, or fax (703) 872-9301 or by email to

CustomerService3700@uspto.gov.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is **703-306-5965**. The examiner can normally be reached on **Monday-Friday, between 5:30 am- 2:00 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and After Final communications.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Other helpful telephone numbers are listed for applicant's benefit.

| | |
|-------------------------------|----------------------------------|
| Allowed Files & Publication | (703) 308-6789 or (888) 786-0101 |
| Assignment Branch | (703) 308-9723 |
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If the information desired is not provided above, or a number has been changed, please call the general information help line below.

| | |
|------------------------|---|
| Information Help line | 1-800-786-9199 |
| Internet PTO-Home Page | http://www.uspto.gov/ |


Marc Jimenez
Patent Examiner
AU 3726

MJ

May 25, 2004